

Amendments to the Claims

Claim 1 (Currently Amended). A method for the preparation of an aqueous suspension of essentially single, non-tangled carbon nanotubes, comprising:

adding to an aqueous medium, prior to the addition of carbon nanotubes to a water solution including a or thereafter, a water-soluble polymeric material selected from the group consisting of polysaccharides and polypeptides, thereby to separate the nanotubes into dispersed, essentially single tubes;

maintaining a mass ratio of said polymeric material to said nanotubes in a range between 0.05 to 20; and

sonicating said solution including said nanotubes.

Claim 2 (Canceled).

Claim 3 (Original). A method for the preparation of dry non-tangled carbon nanotubes comprising: i) the preparation of an aqueous suspension of carbon nanotubes according to claim 1; and ii) the removal of water from said suspension.

Claim 4 (Original). A method of claim 3, wherein the removal of water comprises evaporation, lyophilization, or filtration.

Claim 5 (Currently Amended). A method according to claim 1, wherein ~~the~~ a sum of a concentration of dry, polymer-coated, said carbon nanotubes and a concentration of said polymeric material in the suspension is up to 65% by weight.

Claim 6 (Canceled).

Claim 7 (Original). A method according to claim 1, wherein the polymer is selected from gum arabic, carrageenan, pectin, polygalacturonic acid, alginic acid, chitosan, combinations thereof and derivatives thereof.

Claim 8 (Original). A method according to claim 7, wherein the polymer is gum arabic.

Applicants: Yerushalmi-Rozen et al.
Application No.: 10/667,204
Examiner: McCracken

Claim 9 (Original). A stable suspension of carbon nanotubes, prepared according to claim 1.

Claim 10 (Currently Amended). A powder of carbon nanotubes, comprising a polymer in admixture therewith, obtained by the method according to claim 3.

Claim 11 (Original). The powder of claim 10, wherein the polymer is adsorbed on the nanotubes.

Claim 12 (Withdrawn). Use of the carbon nanotubes of claim 9 for creating a required conductive pattern, comprising: i) providing a solid support, and ii) depositing said carbon nanotubes onto a said solid support in the required conductive pattern.

Claim 13 (Withdrawn). Use of the carbon nanotubes of claim 9 as a template for the growth of crystals of silica, or a hybrid material of silica with carbon nanotubes, comprising: i) providing a silica containing material, and ii) contacting said material with said carbon nanotubes.

Claim 14 (Withdrawn). Use of the carbon nanotubes of claim 9 as a reinforcing agent for polymeric matrices, comprising: i) providing a silica containing material, and ii) contacting said material with said carbon nanotubes.

Claim 15 (Withdrawn). Use of the carbon nanotubes according to claim 14, wherein the polymeric matrix is elastomer.

Claim 16 (Withdrawn). Use of the carbon nanotubes of claim 9 as an electric conductive connector between two electronic devices, comprising: i) providing two electronic devices, and ii) depositing said carbon nanotubes between said device to create a continuous pattern.

Claim 17 (Withdrawn). Use according to claim 16, wherein at least one of the devices is a nanoelectronic device.

Claim 18 (Withdrawn). Use of the carbon nanotubes of claim 9 in a technique that comprises the formation of a thin layer on a surface, comprising: i) providing a solid surface, and ii)

Applicants: Yerushalmi-Rozen et al.
Application No.: 10/667,204
Examiner: McCracken

depositing said carbon nanotubes onto said surface in a pattern enabling at least a partial cover of said surface by a layer of said nanotubes.

Claim 19 (Withdrawn). Use according to claim 18, wherein the technique is printing.

Claim 20 (Withdrawn). Use according to claim 18, wherein the technique is coating.